

What Is Claimed Is:

1. An apparatus for protecting a vehicle occupant (201), the apparatus being configured in such a way that the apparatus for protecting the vehicle occupant (201) triggers restraint means (4) as a function of the occupant's motion, wherein the apparatus is configured in such a way that the apparatus, using an occupant detection system (1) and an impact sensor system (3), determines a height of the center of mass (202) of the vehicle occupant (201) and a force action on the vehicle occupant (201), and thereby predicts the motion of the vehicle occupant (201).
2. The apparatus as recited in Claim 1, wherein the occupant detection system (1) is embodied to determine the seat position of the vehicle occupant (201), the apparatus taking the seat position into account in the prediction of the motion.
3. The apparatus as recited in Claim 1 or 2, wherein the apparatus is connectable to a sensor system for sensing a belt pull-out length, the apparatus taking the belt pull-out length into account in the prediction of the motion.
4. The apparatus as recited in Claim 2, wherein the apparatus is configured in such a way that the apparatus determines an upper-body size using the height of the center of mass (202) of the seat position, and takes the upper-body size into account in the prediction of the motion.
5. The apparatus as recited in Claim 4, wherein the apparatus has a memory that encompasses a relationship between the mass of the vehicle occupant (201) and further anthropometric data.
6. The apparatus as recited in one of the preceding claims, wherein the apparatus is configured in such a way that the apparatus determines the forward displacement by using the impact sensor system (3), and, determines the current seat position during the crash using the initial position.